

## We claim:

Muffler device of a motor vehicle, comprising: 23.

a plurality of mufflers, and

an actuator for changing a flow resistance of exhaust gases flowing through the mufflers to change the damping characteristic of the muffler device,

wherein

the actuator is provided in a pipe branch comprising an inlet and a plurality of outlets, each outlet being connected by a connecting pipe to one of the mufflers, and a throughflow cross section of the inlet being variable by means of the actuator.

- 24. Muffler device according to claim 23, wherein the plurality of mufflers comprise two mufflers and the plurality of outlets comprise two outlets.
- Muffler device according to claim 24, wherein the mufflers are of like construction. 25.
- 26. Muffler device according to claim 24, wherein the connecting pipes have an equal throughflow cross section.
- Muffler device according to claim 24, wherein the outlets of the pipe branch are 27. symmetrical with respect to an axial axis of the inlet of the pipe branch, and the actuator extends along and symmetrically of the axial axis of the inlet.
- 28. Muffler device according to claim 24, wherein the actuator is at least substantially constructionally united with the pipe branch.
- 29. Muffler device according to claim 24, wherein the actuator is biased by a spring in a direction of a closing position that substantially closes the inlet, and is movable when a gas pressure of flowing exhaust gas is increased before the inlet, against a force of the spring into an open position opening the inlet.



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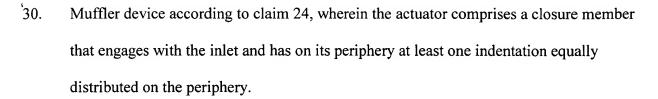
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- 31. Muffler device according to claim 30, comprising two indentations.
- 32. Muffler device according to claim 24, wherein the actuator comprises a closure member that engages with the inlet, and comprises axial passages that are distributed over the cross section of the closure member.
- 33. Muffler device according to claim 24, wherein the actuator comprises a closure member that engages with the inlet and has a diameter such that in a closed position a peripheral gap to an internal diameter of the inlet remains free.
- 34. Muffler device according to claim 24, wherein the actuator comprises a control valve comprising a valve plunger and a closure member comprising a valve disk selected from a flattened, conical or hemispherical valve disk or valve member.
- 35. Muffler device according to claim 24, wherein the actuator comprises a passive control element and automatically reaches its opening position due to a force of a counterpressure of flowing exhaust.
- 36. Muffler device according to claim 35, wherein the force of the counter-pressure is exerted directly on a cross-sectional surface exposed to exhaust gas flow of the closure member of the actuator against a force of a spring.
- 37. Muffler device according to claim 35, wherein the force of the counter-pressure is exerted on a separate actuating element of the actuator, to move the actuator into an open position.



- 38. Muffler device according to claim 37, wherein the actuating element comprises a pressure container, a pressure side of a diaphragm in the pressure container is connected via a pressure duct to the counter-pressure before the inlet of the pipe branch, and a spring is arranged in the pressure container on a low pressure side of the diaphragm, and a middle of the diaphragm is connected to the actuator.
- 39. Muffler device according to claim 38, wherein a middle of the diaphragm is connected to a free end of a valve plunger of a disk valve.
- 40. Muffler device according to claim 24, wherein the actuator comprises an active control element and a separate actuating element that is driven by control electronics of a motor vehicle engine.
- 41. Muffler device according to claim 40, wherein the actuating element comprises a low pressure container, a low pressure side of a diaphragm in the low pressure container being connected via a control duct to one of a vacuum pump and an intake pipe of the motor vehicle engine, a middle of the diaphragm being connected to the actuator.
- 42. Muffler device according to claim 41, wherein the middle of the diaphragm is connected to a free end of a valve plunger of a disk valve.
- 43. Muffler device according to claim 41, wherein a pressure side of the diaphragm of the low pressure container comprises a housing vent bore that provides atmospheric pressure.
- 44. Muffler device according to claim 41, wherein the pressure side of the diaphragm of the low pressure container is directly exposed to the atmosphere.
- 45. Muffler device according to claim 41, wherein a spring is arranged on the low pressure side of the diaphragm in the low pressure container.

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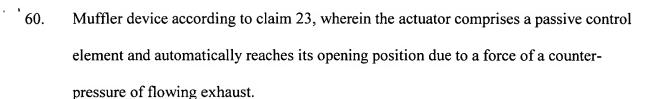
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- 46. Muffler device according to claim 41, wherein an electromagnetically operable on/off valve or a steplessly controllable pressure regulating valve is arranged in the control duct, and the on/off valve or the steplessly controllable pressure regulating valve is driven by the control electronics of the motor vehicle engine.
- Muffler device according to claim 46, wherein the electromagnetically operable on/off 47. valve is a 3/2-way valve and comprises a first connection to one of the intake pipe or a vacuum pump, a second connection to the low pressure side of the low pressure container, and a third connection to the atmosphere, the first connection being connected to the second connection in a first valve position, and the second connection being connected to the third connection in a second valve position.
- 48. Muffler device according to claim 24, wherein the actuator comprises a valve plunger that is guided, sealingly and displaceably, through a sealing plug in a partition of the pipe branch between the two outlets along an axial axis of the inlet, outward as far as a spring housing containing a spring
- 49. Muffler device according to claim 24, wherein the actuator is secured to a stiffened, flattened middle of a diaphragm on a pressure side of a pressure container or low pressure container.
- 50. Muffler device according to claim 48, wherein a sealing plug is sealingly received in a hollow-cylindrical housing section of a spring housing or of a pressure container or low pressure container, and is secured to the housing section on the partition.
- 51. Muffler device according to claim 23, wherein the mufflers are of like construction.
- 52. Muffler device according to claim 23, wherein the connecting pipes have an equal throughflow cross section.



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- '53. Muffler device according to claim 23, wherein the outlets of the pipe branch are symmetrical with respect to an axial axis of the inlet of the pipe branch, and the actuator extends along and symmetrically of the axial axis of the inlet.
- 54. Muffler device according to claim 23, wherein the actuator is at least substantially constructionally united with the pipe branch.
- 55. Muffler device according to claim 23, wherein the actuator is biased by a spring in a direction of a closing position that substantially closes the inlet, and is movable when a gas pressure of flowing exhaust gas is increased before the inlet, against a force of the spring into an open position opening the inlet.
- 56. Muffler device according to claim 23, wherein the actuator comprises a closure member that engages with the inlet and has on its periphery at least one indentation equally distributed on the periphery.
- 57. Muffler device according to claim 23, wherein the actuator comprises a closure member that engages with the inlet, and comprises axial passages that are distributed over the cross section of the closure member.
- 58. Muffler device according to claim 23, wherein the actuator comprises a closure member that engages with the inlet and has a diameter such that in a closed position a peripheral gap to an internal diameter of the inlet remains free.
- 59. Muffler device according to claim 23, wherein the actuator comprises a control valve comprising a valve plunger and a closure member comprising a valve disk selected from a flattened, conical or hemispherical valve disk or valve member.





- 61. Muffler device according to claim 60, wherein the force of the counter-pressure is exerted directly on a cross-sectional surface exposed to exhaust gas flow of the closure member of the actuator against a force of a spring.
- 62. Muffler device according to claim 23, wherein the actuator comprises an active control element and a separate actuating element that is driven by control electronics of a motor vehicle engine.